1.8.1 Data requirements and Method of calculation:

Data for this indicator can easily be taken from the school profile which is updated annually

a. Is the total number of students enrolled
b. Is the total number of classrooms
c. Is the students class rooms ratio
Then c =a/b

1.8.2 Interpretation

The responsibility of repair and construction of schools in BEFARE rests on community. The Afghan community being refugee are poor and could not provide enough finances for construction. For this reason majority of the schools are kacha, and has been a continuous problem. It needs to be sorted out how many of the students are devoid of classroom and are studying in the open air. The learning process is serious marred in rainy and extreme seasons.

1.8.3 Classification of indicator

Type of measurement:

- Qualitative

System component:

- Process

Major Purpose

- Assessment of effectiveness and regional equity

1.9 Percentage of students studying in open airs by region and gender

This indicator depicts the ratio of students studying in open air to the total number of enrolled students dissected by region and gender. It is calculated annually and the ratio is expressed in percentage. For this purpose classes not conducted in classrooms refers to situation where the school buildings do not provide sufficient space to allow all classes to be conducted in

classrooms and hence some classes are routinely conducted outside classrooms.

1.9.1 Data requirements and Method of calculation:

Data for this indicator is drawn from the schools.

a. is the number of students in classes not conducted in classrooms
b. Is the total number of enrolled students
c. Is the percentage of students in classes is not conducted in classrooms by region.

   Then c = (a/b)*100

1.9.2 Interpretation

This process indicator provides a measure for the unmet demand for physical facilities and of constraints on system wide effectiveness. When analyzing this indicator it is important to consider the input indicator intake rate, because the lack of adequate physical facilities may encourage parents not to send their children to school, or to send only male children.

1.9.3 Classification of indicator:

Type of measurement:

- Qualitative

System component:

- Process

Major Purpose

- Assessment of effectiveness and regional equity.

1.10 Repetition Rate by grade

Proportion of pupil enrolled in a given school –year who study in the same grade the following school year. This indicator measures the phenomenon of pupils repeating a grade, and is one measure of the internal efficiency of the primary education cycle.

1.10.1 Data requirements and Method of calculation:

Divide the number of repeaters in a given grade in school year t+1 by the number of pupils enrolled in the same grade in the previous school year t.

$$R = \frac{r}{e}$$

Where

R = Repetition rate at grade i in school year

r = Number of pupil repeating grade I in a given school year

e = Number of pupils enrolled in grade I, in a given school year

1.10.2 Interpretation

Repetition rate in schools should ideally be zero percent. High repetition rates reveal problems in the internal efficiency of the education system and possibly reflect poor level of instruction. When compared across grades, the patterns can indicate specific grades with relatively higher repetition rates, hence requiring more in-depth study of the causes and possible remedies.

1.10.3 Classification of indicator:

Type of measurement:

Quantitative

System component:

input

Major Purpose

Assessment of Quality efficiency effectiveness of teaching staff and pupil.

1.11 Teacher / Pupil ratio (TPR)

Average number of pupils per teacher in primary education in a given school year. This indicator is used to measure the level of human resources input, in terms of number of teachers, in relation to the size of the pupil population.

1.11.1 Data requirements and Method of calculation:

Divide the total number of pupils enrolled in primary education by the number of teachers.

TPR= $\frac{E}{T}$

Where

TPR= Teacher pupil ratio in primary school

E= Total number of pupils in primary school

T= Total number of teachers in primary school

1.11.2 Interpretation

The PTR should normally be compared to BEFARE rules. A high pupil teacher ratio suggests that each teacher has to deal with a large number of pupils and that, conversely pupils receive less attention from the teacher. In BEFARE teacher pupil ratio is 1:40 on the Resource Centre level but when we calculate it class wise the ratio is 1:70 in grade 1 and 1:20 in grade 6
This indicator does not take into account differences in teachers academic qualifications, pedagogical training, professional experience and status, teaching methods, teaching materials and variations in class room conditions--- all factors that could affect the quality of teaching learning and pupil performances

1.11.3 Classification of indicator:

Type of measurement:

Quantitative

System component:

input

Major Purpose

Assessment of Quality efficiency effectiveness of teaching staff.

1.12 *Failure Rate.*

The proportion of pupil who enrolled in a class appears in exam and cannot pass the exam according to BEFARE criteria of getting 40% marks in all the subjects.

This indicator measures the rate at which students fails in each grade through which we can measure the internal efficiency of schools and education cycle.

1.12.1 Data requirements and Method of calculation:

Divide the number of students who failed in a given grade in school year t+1 by the total number of pupils enrolled in the same grade in year t.

$$Fr = \frac{f^{t+1}}{E^{t+1}}$$

Where

Fr= Failure rate at grade i in school year t

f^{t+1} = Number of pupil failed in grade I in a given school year t

E^{t+1} =Total Number of pupils enrolled in grade I, in a given school year t

1.12.2 Interpretation

High failure rate reveal problems in the internal efficiency of the education system and possibly reflects poor level of instruction. When compared across grades, the patterns can indicate specific grades with relatively higher failure rates, May be the high failure rate is because of poor performance in some subjects hence requiring more in-depth study of the causes and possible remedies.

1.12.3 Classification of indicator:

Type of measurement:

Quantitative

System component:

input

Major Purpose

Assessment of Quality efficiency effectiveness of teaching staff.

1.13 Failure Rate by Subjects

The proportion of pupil who failed in a specific subject ie BEFARE criteria of getting 40% marks in a subject.
This indicator measures the rate at which students fails in certain subjects in each grade through which we can measure the internal efficiency of schools and how much inputs the project needs to invest in each subjects (training, teaching and learning materials) Failure rate in subjects can help knowledge centre in revising the curriculum according to the needs of students.

1.13.1 Data requirements and Method of calculation

Divide the number of students who failed in a specific subject by the total number of students in a given grade in school year t+1 by the total number of pupils who have passed that subject in the same grade in year t.

$$Fr= \frac{f^{t+1}}{Ps^{t+1}}$$

Where

Fr= Failure rate by subject in grade i in school year t

f^{t+1} = Number of pupil failed in a specific subject in grade i in a given school year t

Ps^{t+1} =Total Number of pupils who have passed a certain subject in grade i, in a given school year t

1.13.2 Interpretation

High failure rate reveal problems in the internal efficiency of the education system and possibly reflects poor level of instruction. When compared across grades and subject wise , the patterns can indicate specific grades with relatively higher failure rates in a specific subjects, Failure rate by subject can help in estimation of budgets and other inputs for trainings in certain subjects.

1.13.3 Classification of indicator

<u>*Type of measurement:*</u>

Quantitative

System component:

Out put

Major Purpose

Assessment of Quality efficiency effectiveness of teaching staf & education system.

1.14 Promotion Rate

This indicator would depict the percent of students who promotes to the next grade. For instance the promotion criteria of BEFARE is that if a student obtain 40% marks in average in all the subjects he is promoted to the next grade.

1.14.1 Data requirements and Method of calculation

Divide the number of students who passes or promotes in a given grade in school year t+1 by the total number of pupils enrolled in the same grade in year t.

$$Pr = \frac{p^{t+1}}{E^{t+1}}$$

Where

Pr= Promotion rate at grade i in school year t

p^{t+1} = Number of pupil promoted in grade I in a given school year t

E^{t+1} =Total Number of pupils enrolled in grade I, in a given school year t

1.14.2 Interpretation

Promotion rates are useful measures of various aspects of system efficiency and effectiveness, when promotion to the next higher grade, or level, of schooling is determined solely on the grounds of academic attainments. The assumption is that the most efficient progression through the system for the majority of the students is to start school at the age determined by BEFARE and each year without repetition or interruption move onto the next higher grade.

High promotion rates indicate an efficient and effective school system.

1.14.3 Classification of indicator

Type of measurement:

Quantitative

System component:

output

Major Purpose

Assessment of efficiency effectiveness and gender equity.

1.15 Retention Rate by region, level and gender

The retention rate measures the extent to which students remain enrolled in school from one year to the next regardless of whether or not they move to higher grades.

1.15.1 Data requirements and Method of calculation

Data required for this indicator is derived from administrative record of schools

a. number of students enrolled this year who were also enrolled last year in this level of schooling
b. Number of students enrolled last year in this level of schooling.
c. The retention rate for this level of schooling.
   Then c = (a/b)*100

1.15.2 Interpretation

Retention rate is the measure of both efficiency and effectiveness of the schooling system. The higher the retention rate the more effective the system has to be in promoting the ethic of education. High retention rates if accompanied by high survival and transition rates and low repetition rates demonstrate high level of effectiveness.

1.15.3 Classification of indicator

Type of measurement:

- Quantitative

System component:

- Output

Major Purpose

- Assessment of efficiency effectiveness and gender equity

1.16 Dropout Rate by grade, gender and region

This indicator shows the total no of student who leave school before the completion of a given stage of education or leaving at some intermediate or non terminal point in a period of schooling.

Dropout is the total number of students left school with out obtaining school leaving certificate during the whole academic year for what ever reason.

1.16.1 Data requirements and Method of calculation

Data could be arranged from the school administrative records on monthly basis or the annual exam results record. Dropout could be calculated biannually and annually.

a= Number of students enrolled in the academic period for which dropout is calculated.

b= number of students in register in the last month for which dropout is calculated.

c= Dropout

Then c=a-b

1.16.2 Interpretation

Drop out data is both measure for effectiveness and efficiency. It shows that how much of the school going age students are leaving school up to grade 5. Student who graduates from grade 6 is not considered as dropout.

1.16.3 Classification of indicator:

Type of measurement:

- Quantitative

System component:

- Output

Major Purpose

- Assessment of efficiency effectiveness and gender disparity in education

1.17 *Cohort survival rate by gender (percentage of pupil successfully complete education to grade 6)*

Cohort survival rate measure the extent to which group of pupils who are enrolled in the first grade and successfully complete education till grade 6 of primary education in a particular schooling year. Its purpose is to assess the **"Holding Power"** and internal efficiency of the education System. The survival rate also indicates the magnitude of drop-out during the primary education.

1.17.1 Data requirements and Method of calculation

Data for calculation of cohort survival rate can be obtained from MIS database. Divide the total number of cohort group of students who reached grade 6 of primary education by the number of pupil actually enrolled 6 years ago in the first grade of primary education and multiply the result by hundred

$$SR^k_{g,i} = \frac{\sum_{t=1}^{m} P^t_{g,i}}{E^k_g}$$

Where $P^t_{g,i} = E^{t+1}_{g,i+1} - R^{t=1}_{g,i+1}$

I= grade t=year g= cohort group

$SR^k_{g,i}$ = Survival rate of pupil-cohort g at grade I for a reference year k

K^k_g = Total number of pupil belonging to cohort g at a reference year k

$P^t_{g,i}$ = Promotes from E^k_g who would join successive grade I throughout successive year t

R^t_i = number of pupil repeating grade I in school year t

Introduction

Quality is a buzz word nowadays, notwithstanding no hard and fast rule could be lay down to gauge it. Nevertheless, certain parameters can be established as standard criterion of quality in education and accomplishment of those standards would be considered as reaching the desired level of quality.

MIS/M&E unit in collaboration with Formal Education (FE) unit and Non-Formal Education (NFE) unit has developed some indicators that would be used for measuring the effectiveness and efficiency of BEFARE educational activities. This paper delineates those benchmarks. Defining standards of primary education within BEFARE would address the broad based desire and commitments of the project to uphold quality in promoting primary education.

What is an indicator?

An indicator is a pointer. It can be a measurement, a number, a symbol, a fact, an opinion or a perception that pinpoints a specific condition or situation, and measures changes in that condition or situation over the time. In other words, indicators provide a close look at the results of initiatives and actions. For this reason, they are front-line instruments in monitoring and evaluating development work. *(Shavelson, Richard)*

What are reasonable expectations for an indicators system?

A good educational indicator system is expected to provide accurate and precise information of the condition of education and contribute to its improvement. Indicators are thus expected to assist policy makers as they formulate schooling goals and translate those goals into action.

Variables in the education production system

In the production system of education we have input, process, and output variables.

1.17.2 Interpretation

Cohort survival rate to grade 6 of primary education is of particular interest because the completion of at least 6 years of schooling is commonly considered a prerequisite for a sustainable promotion of literacy.

1.17.3 Classification of indicator

Type of measurement

- Quantitative

System component

- Output

Major Purpose

- Assessment of efficiency effectiveness and gender disparity in education.

1.18 Monitoring by MT by region and gender

This indicator describes the frequency MT visit to a school in particular time, observation and suggestion given to the concerned staff. On the job training is given to FESs as well as teachers in every Resource Center then they are regularly monitored by MTs in the classrooms. Besides training this is an important activity of master trainers for which every school is visited and feed back is given to concern manager.

1.18.1 Data requirements and Method of calculation:

The data could be acquired from the MTs observations record. The data could be easily calculated by observations through check list

Section	Headings	0	1	2	3	4	Notes
1. Lesson note	Has clear appropriately written objectives for instruction						
	Selected objectives suitable for the student group						
	Objectives match the content of the lesson						
	Objectives suits the selected teaching method						
	Uses a variety of materials and resources in keeping with the objectives						
	Instruction is related to objectives and provides for assessment which is linked to objectives						
2. Introduction	Shows creativity in lesson design						
	Links new ideas to prior knowledge						
	Uses a variety of motivational strategies to achieve learning						
3. Development of the lesson	Follows a logical sequence in instruction						
	The subject matter is accurate and grasps central concepts of discipline						
	Allows for different learning styles, abilities, cultures, genders and experiences and creates meaningful learning experiences						
	Communication both verbal and non-verbal was very effective						
	New learning was reinforced getting students to actively participate						
	Paces lesson well						
	Completed the lesson successfully						
4.Evaluation and assessment	Uses appropriate assessment to evaluate stated objectives						
	Provided feedback based on the evaluation						
	Uses a variety of assessment tools						
5.Learning environment	Establishes and maintains a positive classroom environment						
	Organizes and manages time space and activities to promote learning						
	Employs a variety of strategies to monitor behavior						
6.Teacher Personality	Very pleasant personality						
	Is flexible						
	Is open to suggestions						

(Ms. Asoka Report)

1.18.2 Interpretation

The validity of the data depends on marking techniques of the MTs. If teachers are already trained by BEFARE and have 3-4 years experience in teaching but still if the teacher get below 60% marks. This situation is alarming and the MTs should concentrate on improving skills of such teachers.

1.18.3 Classification of indicator:

Type of measurement

- Qualitative

System component:

- Output

Major Purpose

- Assessment of Quality efficiency effectiveness of teaching staff.

1.19 Performance assessment through competencies

BEFARe curriculum provide different competencies to students they are categorized as under.

1.19.1 Data requirements and Method of calculation:

The data could be acquired from students in schools. Teachers or FES can asses their students performance through exams by scaleing

s.no	Competencies	Very Poor	Poor	Satisfactory	Good	Very good	Excellent
		0	1	2	3	4	5
1	Life skills knowledge						
2	Rote reading						
3	Reading with comprehensions						
4	Writing Dictation						
5	Writing letter						
6	Numeracy and Arithmetics						
7	Reading Holy Quran						

1.19.2 Interpretation

The validity of the data depends on marking techniques of teaching staff how they asses their students performance and how they perceive the scaling.

1.19.3 Classification of indicator:

Type of measurement

- Qualitative

System component:

- Output

Major Purpose

- Assessment of performance of students.

1.20 Focal Points by region and gender

Field Education Supervisors coordinate focal point activities in schools. The main objective of the activity is subject up gradation. Teachers from a cluster schools get together for 2 hours once a month and discuss problems they faced in teaching of different subjects. In Resource Centres once a year they arrange five days focal point activity.

1.20.1 Data requirements and Method of calculation

The data could be acquired from the FES, MTs observations record. The data could be easily calculated by observations through check list
Grading for each activity should be done as

Poor	Fair	Good	Very good
4	6	8	10

Learning /sharing environment

i. Presence of teachers
ii. The classroom was arranged as per requirement of the teachers.

Content

i. Objectives were clearly defined & met

ii. Topics were prioritized on the basis of need for clarification.

iii. Topics were assigned to different teachers according to their capabilities.

Facilitator

i. Communicated clearly and effectively

ii. Responded appropriately to questions

iii. Kept session alive.

iv. Assignments were well written and appropriate to content

End

Focal point activity was evaluated

1.20.2 Interpretation

The validity of the data depends on marking techniques of the MTs and FESs. Focal point event scoring less then 50% should be rearranged and may be conducted by MT.

1.20.3 Classification of indicator

Type of measurement:

Qualitative

System component:

input

Major Purpose

Assessment of Quality efficiency effectiveness of teaching staff.

2. Non formal Education

2.1 Enrollment in new session of a course

This indicator reflects the total number of participants joining the course of Non- Formal education in the first level of each course, dissected by region and gender in a particular year.

2.1.1 Data requirements and Method of calculation

Data for verification of this indicator would be derived from the admission register maintainedby instructor at courses, for instance total number of participants admitted to a level of course at a given period of time.

2.1.2 Interpretation

Start of new course provides an indication of annual growth rate, supply of participants places, attractiveness of Non-Formal education system to the out of school age population and to their families.
It would also be used to present ratio of growth rate between boys and girls enrolments in any particular area, and the extents of gender disparities in availing educational opportunities.

2.1.3 Classification of indicator :

Classification of indicator details the kind of measurement, nature of activity/indicator and purpose of the indicator.

Type of measurement

- Quantitative

System component:

- Input

Major Purpose

- Scale & expansion of NFE sector
- Assessment of efficiency
- Gender equity

2.2 *Number of participants by age group*

This indicator is a count of the number of course participants, dissected by age and gender group

2.2.1 Data requirements and Method of calculation

Data for this indicator would be drawn from the course records. The age groups used for this indicator are categorized as follows.

9-12 yrs

13-16yrs

17-20 yrs

21-24 yrs

25-28 yrs

29-32 yrs

33-36 yrs

37-40 yrs

>41yrs

2.2.2 Interpretation

The distribution of number of participants provides important information on the acceptance of NFE programmes by different community groups.

2.2.3 Classification of indicator

Type of measurement:

- Quantitative

System component:

- Input

Major Purpose

- Scale of NFE sector

2.3 *Expenditure on salaries, materials (teaching learning, extra curricular material) and trainings(Pre-service and in-service) as a proportion of total education outlays*

This indicator depicts the total annual expenditure on salaries of NFE staff, education materials and cost of trainings.

2.3.1 Data requirements and Method of calculation:

The data can be acquired from the finance unit.

2.3.2 Interpretation

The largest education budget is that related to the payment of salaries, material and trainings of teaching staff.
How much of the whole budget is spent under what heads.

2.3.3 Classification of indicator

Type of measurement:

- Qualitative

System component:

- Input

Major Purpose

- Assessment of the inputs in education activity.

2.4 *Failure Rate.*

The proportion of pupil who was enrolled in a course and appear in exam but cannot pass the exam according to BEFARE criteria of getting least 40% marks in all the subjects.
This indicator measures the rate at which students fails in each course level through which we can measure the internal efficiency of courses and education cycle.

2.4.1 Data requirements and Method of calculation

Divide the number of failed students in a given course year t+1 by the total number of pupils enrolled in the same course in year t.

$$Fr= \frac{f^{t+1}}{E^{t+1}}$$

Where

Fr= Failure rate at course i in year t

f^{t+1} = Number of pupil failed in course i in a given school year t

E^{t+1} =Total Number of pupils enrolled in course i, in a given year t

2.4.2 Interpretation

High failure rate reveal problems in the internal efficiency of the education system.

2.4.3 Classification of indicator

Type of measurement:

- Quantitative

System component:

- input

Major Purpose

- *Assessment of Quality efficiency effectiveness of teaching staff*

2.5 Failure Rate by level

The proportion of pupil who was enrolled in a course in a particular level and appear in exam but cannot pass the exam according to BEFARE criteria of getting at least 40% marks in all the subjects.

This indicator measures the rate at which students fails in each level of a course through which we can measure the efficiency of students in a certain level of courses and education cycle.

2.5.1 Data requirements and Method of calculation:

Divide the number of failed students in a given level of course year t+1 by the total number of pupils enrolled in the same level of course in year t.

$$Fr= \frac{f^{t+1}}{E^{t+1}}$$

Where

Fr= Failure rate at level of course i in year t

f^{t+1} = Number of pupil failed at certain level of course i in a given year t

E^{t+1} =Total Number of pupils enrolled in a level of course i, in a given year t

2.5.2 Interpretation

High failure rate at certain level of a course reveal problems in the internal efficiency of the education system. Failure rate at course levels can help in the estimation at which level more inputs from projects ragarding trainings and materials are required.

2.5.3 Classification of indicator:

Type of measurement:

- Quantitative

System component:

- input

Major Purpose

- *Assessment of Quality efficiency effectiveness of teaching staff*

2.6 Promotion Rate.

This indicator would depict the percent of participants who promotes to the next high level of course.

2.6.1 Data requirements and Method of calculation

Divide the number of participants who passes or promotes in a given level in course year t+1 by the total number of participants enrolled in the same level of course in year t.

Input variables

In this variable we have students, teachers, school Instructional materials & equipments, facilities, Trainings, Physical environment, and community involvement characteristics.

Output variables

In this variable we have cognitive achievements, Improved manual skills (social & emotional intelligence), Attitudinal & behavioral changes.

Process variables

In this variable we have classroom technologies, teachers competences, teachers and students time allocation, Forms of instructional organizations.

Following are the indicators which would be used to monitor the progress and quality of BEFARE educational activities.

1. Formal Education

1.1 New enrollment by Region, Gender and Grade

This indicator reflects the total number of fresh students entering the primary school, dissected by region and gender in a particular year. In this context new enrollment refers to the students who were not enrolled in a primary school at any time previously.

1.1.1 Data requirements and Method of calculation

Data for verification of this indicator would be derived from the admission records maintained at schools, for instance total number of students in grade 1 at a given period of time.

$$Pr = \frac{p^{t+1}}{E^{t+1}}$$

Where

Pr= Promotion rate at level i in course year t

p^{t+1} = Number of participants promoted in level i in a given course year t

E^{t+1} =Total Number of participants enrolled in grade i, in a given course year t

2.6.2 Interpretation

Promotion rates are useful measures of various aspects of system efficiency and effectiveness.

2.6.3 Classification of indicator:

Type of measurement:

- Quantitative

System component:

- output

Major Purpose

- Assessment of efficiency effectiveness and gender equity

2.7 Dropout Rate with in the level of course by gender and region

This indicator shows the total no of participants who leave the course before the completion of a given stage of Non-Formal education. The dropout rate can be calculated inter levels and for the course. That is throughout 18 months of a course.

2.7.1 Data requirements and Method of calculation

Data could be arranged from the course administrative records on monthly basis or the annual exam results record. Dropout could be calculated biannually and annually.

a= Number of participants enrolled in the academic period i.e 18 months for which dropout is calculated.

b= number of participants register in the last month for which dropout is calculated.

c= Dropout

Then c=a-b

2.7.2 Interpretation

Dropout data is to measure both of the effectiveness and efficiency. It shows that how much of the potential participants have lift out the NFE course without completion.

2.7.3 Classification of indicator

Type of measurement:

- Quantitative

System component:

- Output

Major Purpose

- Assessment of efficiency effectiveness and gender disparity in education

3. Community Participation

3.1 Community participation

Community organization is the bed rock of their involvement in any development work. As to achieve this aim School Management Committees are established in each of the formal school level. SMC comprised of educated community elder, influential and head teacher. Every attempt is being made to give equal representation to all ethnic groups. SMC lead every community oriented work and arranged all the required support during implementation.

3.1.1 Data requirements and Method of calculation:

The intensity of community involvement can be measured through the following scale



Section	Headings	3	4	5	6	7	Notes
1. No. of meetings	Meetings are arranged at specific intervals Members are present in every meeting above 60%						
No of events arranged and facilitated by SMCs at school level	• Parents days • Educational exhibitions • Competitions among students(sports, debates posters etc) • Annual days • Trees plantation campaigns						
Associations made	Old students groups Child to child groups						
Financial contribution	Financial contribution from community						
Infrastructure of the school	Helping the school administration physically in repair & maintenance, additional construction.						
Motivation	Increase in enrollment specially girls education						
	Community start voluntary participation in education affairs.						
	Parents involvement in child education						

3.1.2 Classification of indicator

Type of measurement:

- Qualitative

System component:

- Input

Major Purpose

- Effect of community involvement on educational system

1.1.2 Interpretation

New enrollment provide an indication of annual growth rate, supply of student places, attractiveness of the education system to the school aged population and their families, and financial capacity of families to support students.

It would present the ratio of growth rate between boys and girls new enrolments in any particular grade and the extents of gender disparities in availing educational opportunities.

1.1.3 Classification of indicator

Classification of indicator entails the kind of measurement, nature of activity/indicator and purpose of the indicator.

Type of measurement

- Quantitative

System component:

- Input

Major Purpose

- Scale of current school system & rate of expansion
- Assessment of efficiency
- Gender equity

1.2 Percentage of under and over aged enrollment by region, gender and grade

This indicator would depict the percent of students who are either below or above the defined normal age for that specific grade, region and gender by BEFARE. For instance the age of 7 years for plan area and 8 years for hilly area students' are lay down by BEFARE.

1.2.1 Data requirements and Method of calculation

The data could be arranged from the birth certificate or admission/registration ecords in the school.

1.2.2 Interpretation

The proportion of under and over aged children put considerable constraints on teaching style, efficiency and affect adversely the rates of student progression.

Teachers with classes containing high proportion of under aged students may adjust teaching methodology and speed of presenting material. In addition, they can amend curricula taking into account the cognitive development level of the younger children. Similarly teachers with classes having high proportion of over aged students may make such adjustment. But such adjustment for over aged student would go to the disadvantage of the other groups and vice versa.

1.2.3 Classification of indicator

Type of measurement:

- Quantitative

System component:

- Input

Major Purpose

- Assessment of system efficiency

1.3 Distribution of teachers by level of Qualification

The indicator measures the number of teachers employed in a particular year in each level of schooling, by level of qualification. BEFARE minimum standard of qualification is 10 years of schooling in Pakistan educational system or 12 years form Afghan educational system and a certificate or diploma in teacher training from recognized institute. Therefore, the distribution of teacher by level of qualification would fall in the following three categories:

1. Qualified
2. Under qualified
3. Un qualified

Qualified teachers are those possessing the academic and teacher trainings attainments determined by BEFARE to be a standard requirement for a particular level.

Under qualified teachers are those who possess the required academic attainment but have no qualification in education, which considered as a standard requirement for BEFARE. e.g. a person having master degree in urdu and is teaching urdu but haven't got any training how to teach primary student is considered under qualified.

Unqualified teachers would be those who have neither the academic nor the teacher training attainment determined by BEFARE.

1.3.1 Data requirements and Method of calculation

This data could be easily derived from the personal bio data and testimonial of teachers.

$$\%Ty\,p.q = \frac{Typ.q}{Ttp} * 100$$

Where % Ty p.q= Percentage of primary school teachers having the required academic qualifications in year t

Ty p.q= Total number of teachers having the required academic qualifications in year t.

Tt p =Total number of primary school teachers in year t

1.3.2 Interpretation:

This indicator is a qualitative measure of an important input variable. In order to be effective in the class room a teacher needs to posses the relevant knowledge and a thoroughly trained in how to impart that knowledge to students. It should be kept in mind that some time obsolesce of employee is a big problem the more you give training but less effect is seen in student teacher learning process. For this purpose BEFARE criteria should be followed.

1.3.3 Classification of indicator:

Type of measurement:

- Qualitative

System component:

- Input

Major Purpose

- Assessment of effectiveness and efficiency

1.4 Distribution of teachers by level of experience

This indicator is an annual measure of the experience of the teaching workforce. For purposes of measurements, years of experience in the teaching service are grouped in four categories, as follows.

0-5 years
5-10 years
11-20 years
20+years

The years of experience are measured from the date that the teacher first assumed teaching responsibilities.

1.4.1 Data requirements and Method of calculation:

This data can be easily derived from the personal bio data of teachers, or Afghan refugees Teachers Profile data base ARTPD.

1.4.2 Interpretation

Years of experience is assumed to reflect the incorporation of knowledge and skills acquired formally and informally and applied to teaching practice. Years of experience do not necessarily lead to greater teaching effectiveness or efficiency. The quality of that experience is a more important determinant of classroom outcomes than simple length of teaching service. A measure of

quality of experience is the frequency and duration of in-service courses teachers attend and their openness to adopt new teaching strategies.

1.4.3 Classification of indicator:

Type of measurement:

- Qualitative

System component:

- Input

Major Purpose

- Assessment of effectiveness and efficiency

1.5 Expenditure on salaries, materials *(teaching learning, extra curricular material) and trainings(Pre-service and in-service) as a proportion of total education outlays*

This indicator depicts the total annual expenditure on salaries of school staff, education material and cost of trainings.

1.5.1 Data requirements and Method of calculation:

The data can be acquired from the accounts department

1.5.2 Interpretation

The largest education budget is that related to the payment of salaries, material and trainings of teaching staff.

How much of the whole budget is spent under these heads.

1.5.3 Classification of indicator:

Type of measurement:

- Qualitative

System component:

- Input

Major Purpose

- Assessment of the inputs in education activity.

1.6 Expenditure on trainings in specific subject (Urdu & English) as a proportion of total trainings outlays

This indicator depicts total expenditure of training on a specific subject and then it will be weighed with the students' performance in that specific subject.

1.6.1 Data requirements and Method of calculation:

This indicator is based on the data derived from training accounts of finance unit. Students performance in that specific subject can be detected from mid term and final examination results. Marks of students in different subjects are compared with the expenditure of trainings on that subject.

1.6.2 Interpretation

Expenditures calculations of trainings on different subject can help in assessment of trainings as an input and students performance as an out come. This indicator is very important in decision making regarding how much financial and physical inputs is required in a specific subject training.

1.6.3 Classification of indicator:

Type of measurement:

- Quantitative

System component:

- Input

Major Purpose

- Assessment of the inputs in education activity.

1.7 Percentage of students in Multi-grade classes by region and gender

The indicator illustrate the ratio of students enrolled in multi-grade classes to the total number of students enrolled in the same level of schooling in percentage and dissected by region. It is calculated biannually.

1.7.1 Data requirements and Method of calculation:

Data for this indicator are drawn from school records and would be calculated as

A= is the number of students enrolled in multi-grade classes

B= is the total number of students enrolled in that level of schooling.

C= is the percentage of students in multi-grade classes in that level of schooling.

Then c = (a/b)* 100

1.7.2 Interpretation:

Under the circumstances of inadequate resources students could be accommodated in multi-grade, single teacher classrooms. It is reasonable to assume that this practice would have some effect on teaching process and learning outcomes. This indicator therefore, is useful in assessing the potential effect whether positive or negative of multi-grade classes on the efficiency and effectiveness of the education.

1.7.3 Classification of indicator:

Type of measurement:

- Qualitative

System component:

- Process

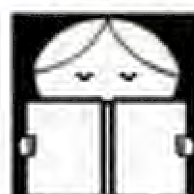
Major Purpose

- Assessment of effectiveness and regional equity

1.8 Student classrooms ratios by region and level.

This indicator describes the total number of students to the total number of classrooms in a given region. The number of student is measured to full time staff equivalent units, and classrooms refer to a particular area of a school building within which a teacher conducts a single or multi-grade class.





INDICATORS OF EDUCATIONAL EFFICIENCY AND EFFECTIVENESS FOR BEFARe

July 25, 2003

MIS/M&E unit



Basic Education for Afghan Refugees

د افغان مهاجرو له پاره لومړني تعليمات

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

(German Agency for Technical Cooperation)

gtz BEFARE

North- West Frontier Province



CHITRAL
DIR UPPER
SWAT
SHANGLA
DIR LOWER
BUNER
MALAKAND
BAJOR
MOMAND AGENCY
KHYBER AGENCY
ORAKZAI AGENCY
KURRAM AGENCY
NORTH WAZIRISTAN
SOUTH WAZIRISTAN
KOHISTAN
BATTAGRAM
MANSEHRA
ABBOTTABAD
HARIPUR
MARDAN
SWABI
CHARSADDA
NOWSHERA
PESHAWAR
KOHAT
HANGU
KARAK
BANNU
LAKKI
TANK
D.I.KHAN

0 50 100
Kilometers

Area covered by Resource Centres

ABBOTTABAD
BANNU
HANGU
PESHAWAR
MARDAN
TIMERGARA

TABLE OF CONTENTS



Glossary

Classroom

Any building attached to school used to accommodate a class

Dropout

Leaving school before the completion of a given stage of education or leaving at some intermediate or non terminal point in a cycle of education. .

Section

An extension of one grade to another

Grade

Schooling level

Pupil

A child enrolled in full time education, the figures are taken from the register

Overage pupil

Pupil enrolled in grade at age more than 7 years and 8 years for grade 2, etc

Under age pupil

Pupil enrolled in grade 1 at age less than six years

Repeaters

Pupils who cannot pass from one grade to another and again enroll in the same grade

Multi-grade teaching

One teacher at a time teaching to two grades in a classroom

Non Formal education refers to any organized educational activity which takes place outside the framework of Formal Education system. This is targeted at meeting the need of specific group of learners, children, youth or adults. Its aim is to enable individuals to contribute effectively in the wider society as a citizen by enhancing their understanding, abilities and skills.

Literacy

Those who can read and write a short and simple statement in their every day life

Session of a course

Normally new courses start in January and July, so if a home school starts in January 2003 it will ends in July 2005.

Session	Course	Level 1	Level 2	Level 3	Level 4	Level 5
Jan2003	Home school	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Jan2003	Literacy course	Primer	Arithmetic	Reader		

If we want to calculate the
Dropout rate, enrollment, expenses per course participant, Survival rate of participants.
It will be easy to go through sessions

Literacy course

It comprises of three level primer, Arithmetic and Reader. Each level is of six months. A literacy course is considered complete if all the levels are completed in 18 months.

Participants of literacy course

Minimum age of literacy participants is > 12 years. The participant will be considered graduate once they complete all three levels of Primer, Arithmetic, and Reader.

Home school course

It consist of five levels i.e. Grade1, Grade 2, Grade 3, Grade 4, Grade 5 completes in 30 month's period.

Participants of home school course

The home school participant's maximum age is 12 years. Each course will consist of 25 – 30 participants. The participants will be considered graduate once they complete all the five levels or grades.